BTEC Assignment Brief

Qualification	Pearson BTEC International Level 3 Subsidiary Diploma in Applied Science Pearson BTEC International Level 3 Foundation Diploma in Applied Science Pearson BTEC International Level 3 Diploma in Applied Science Pearson BTEC International Level 3 Diploma in Biomedical Science Pearson BTEC International Level 3 Extended Diploma in Applied Science Pearson BTEC International Level 3 Extended Diploma in Biomedical Science Pearson BTEC International Level 3 Extended Diploma in Environmental Science
Unit number and title	**Unit 11: Functional Physiology of Human Body Systems**
Learning aim(s)	**B:** Understand the structure, function and disorders of the endocrine and nervous systems
Assignment title	**Endocrine and Nervous Systems**
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	You plan to study for a degree in Biomedical Sciences and, in preparation for this, have been offered a work experience placement in the Endocrinology and Metabolic Medicine Department at your local hospital. During your placement, you will observe specialist endocrinology nurses who carry out investigative tests and administer specialist endocrine therapies to patients suffering from a wide range of conditions. On completion of your placement, you must produce a patient information booklet which explains and analyses the organisation, role and interrelationship of the endocrine and nervous systems, evaluates the impact of changes to the systems that occur throughout an individual's life and discusses the impact of overproduction or underproduction of hormones.

Task	Your patient information booklet will include referenced secondary source diagrams that you have used to help explain the structures and functions of the endocrine and nervous systems. • **Analyse** in detail how the endocrine system works in conjunction with the nervous system to coordinate and control bodily functions and effect and administer changes to organs and body systems. The information must include detail relating to the role of synapses, the speed of transmission of nerve impulses and the speed and longevity of hormonal responses. For the **endocrine** system, you must include all of the main organs and glands of the endocrine system. You must name the hormones secreted and their specific target organs/tissues and explain the

	function of the hormones secreted. The relationship between different hormones must be discussed e.g. explain how the hormones produced by one gland stimulates hormone production by other glands or how two hormones work together to regulate the activity of body cells and bring about homeostasis. Complete this section by explaining the health implications of overproduction of one hormone and underproduction of a different hormone. For the **nervous** system, you must briefly explain the organisation and functions of the: o central nervous system o peripheral nervous system o parasympathetic nervous system o sympathetic nervous system The main section of your booklet will focus on the changes that occur naturally through ageing or through degeneration or disorder of the endocrine and nervous systems. • You must use a range of sources of information to **evaluate** the changes that occur by considering the significance of the sensitivity of target tissues, the response of target organs and the amount and rate of hormone production. The information provided must include consideration of the impact of **one** named disorder of the endocrine system and **one** named disorder of the nervous system. Factors to consider will include: o developmental milestones o gross and fine motor skills o puberty o menopause o emotional and intellectual changes
Checklist of evidence required	A patient information booklet with detailed information that: • evaluates the impact of changes to the nervous and endocrine systems throughout life • analyses the interrelationship between the nervous and endocrine systems • explains the organisation and functions of the endocrine system • explains the organisation and functions of the nervous system • includes properly referenced diagrams of the endocrine and nervous systems

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria, you must show that you are able to:

B.D2	Evaluate the impact of changes to the nervous and hormonal systems throughout life.
B.M3	Analyse how the functions of the nervous and endocrine systems are interrelated.
B.P4	Explain the organisation of the endocrine system in relation to its function.
B.P5	Explain the organisation of the nervous system in relation to its function.
Sources of information to support you with this Assignment	https://www.emedicinehealth.com/anatomy_of_the_endocrine_system/article_em.htm#pancreas https://www.livescience.com/22665-nervous-system.html https://www.livescience.com/26496-endocrine-system.html https://www.endocrineweb.com/endocrinology/overview-hypothalamus https://www.nursingtimes.net/roles/older-people-nurses/anatomy-and-physiology-of-ageing-7-the-endocrine-system/7020668.article
Other assessment materials attached to this Assignment Brief	e.g. work sheets, risk assessments, case study